

ORIGINAL

NEW APPLICATION



0000102283

BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

2009 SEP -1 P 3:43

Arizona Corporation Commission

DOCKETED

SEP -1 2009

DOCKETED BY

102

IN THE MATTER OF THE APPLICATION) DOCKET NO. E-01049A-09-
OF MORENCI WATER & ELECTRIC COMPANY) E-01049A-09-0419
- ELECTRIC DIVISION - FOR APPROVAL OF)
ITS 2010 RENEWABLE ENERGY STANDARD) **APPLICATION FOR APPROVAL**
TARIFF IMPLEMENTATION PLAN AND) **AND REQUEST FOR PARTIAL**
REQUEST FOR PARTIAL WAIVER) **WAIVER**

The Morenci Water and Electric Company ("MWE") hereby submits its proposed 2010 Renewable Energy Standard Tariff Implementation Plan ("2010 REST Plan") – including its Plan for Distributed Renewable Energy Resources – required by A.A.C. R14-4-1813 under the Renewable Energy Standard Tariff Rules ("REST Rules"). MWE requests approval of its 2010 REST Plan. Morenci further requests an extension of the continued partial waiver to exclude energy sales to Freeport-McMoRan Copper & Gold Morenci, Inc. ("FMI Morenci") and Freeport-McMoRan Copper & Gold Safford, Inc. ("FMI Safford") from calculating both the Annual Renewable Energy Requirement under A.A.C. R14-2-1804 and the annual Distributed Renewable Energy Requirement under A.A.C. R14-2-1805.

I. INTRODUCTION

In terms of number of customers, MWE is a small electric utility that serves approximately 2,284 customers in and around the town of Morenci, Arizona. MWE serves the FMI Morenci mine per an agreement approved in Decision No. 66937 (April 21, 2004). MWE also serves the mine owned and operated by FMI Safford as approved in Decision Nos. 69200 and 69211 (December 21,

2006). MWE's customer base consists of approximately 2,029 residential customers and 255 non-residential customers. Currently, approximately 1,171 of MWE's residential customers are renters within MWE's town-site. Further, FMI Morenci and FMI Safford have demand over 3 MW each month. Energy sales to FMI Morenci and FMI Safford represent approximately 98.71 percent of MWE's total kWh sales for 2008 and approximately 98.39 percent of MWE's total kWh sales in 2007. Presently, MWE owns no generation and procures all of its power from the wholesale market to meet load.

II. RENEWABLE ENERGY STANDARD

MWE intends and plans to make best efforts to meet the requirements set forth in the REST Rules. MWE's energy sales in 2007 and 2008 equaled 2,246,888,027 kWh and 1,872,173,183 kWh respectively. Of those amounts, approximately 2,217,863,000 kWh in 2008 and 1,842,038,000 kWh in 2007 of energy sales were to FMI Morenci and FMI Safford. In other words, between 98.39 percent and 98.71 percent of MWE's total energy sales will be to FMI Morenci and FMI Safford.

MWE forecasts that its energy sales for 2009 to be approximately 1,600,000,000 kWh with 22,000,000 kWh (approximately 1.375 percent) attributable to residential customers and non-residential customers besides FMI Morenci and FMI Safford. This lower estimation is largely due to the economic downturn. MWE anticipates its Annual Renewable Energy Requirement being as follows, if the energy sales to FMI Morenci and FMI Safford are excluded:

- approximately 550,000 kWh in 2009;
- approximately 660,000 kWh in 2010;
- approximately 770,000 kWh in 2011;
- approximately 880,000 kWh in 2012;
- approximately 990,000 kWh in 2013; and
- ultimately approximately 3,300,000 kWh after 2024.

MWE's first REST Plan was approved in Decision No. 70303 (April 24, 2008). Its 2009 REST Plan was approved in Decision No. 70952 (April 7, 2009). By the time this Application is

1 filed, MWE will have approximately 17 months of experience implementing the REST Rules
2 requirements through its 2008 and 2009 REST Plans. There is still much uncertainty with regards to
3 whether MWE can consistently procure enough renewable energy, while meeting all of the
4 requirements in the REST Rules, and whether customers are willing and able to engage in acquiring
5 and installing eligible Distributed Renewable Energy Resources. MWE's service territory is remote
6 and the Company possesses limited expertise and personnel that it can dedicate to developing
7 additional strategies to procure renewable resources as required in the REST Rules. Moreover, the
8 recent economic downturn has had a substantial adverse affect on MWE's customer base. Even so,
9 in its proposed 2010 REST Plan, MWE is proposing to continue elevated incentives for eligible
10 distributed generation and a continued effort to attempt to procure eligible grid-tied renewable
11 energy. MWE hopes that it can expand its efforts through an issuance of a request for proposal
12 ("RFP") and responses thereto once there is improvement in the economy.

13 14 **III. DISTRIBUTED RENEWABLE ENERGY RESOURCES**

15 Regarding the annual Distributed Renewable Energy Requirement, MWE does not have the
16 experience of the larger utilities in Arizona. Even so, the Company's 2010 REST Plan includes
17 incentive payments to customers to develop and install eligible Distributed Renewable Energy
18 Resources. Eligible Distributed Renewable Energy Resources include:

- 19 • Photovoltaic Systems;
- 20 • Solar Space Cooling;
- 21 • Non-Residential Solar Water Heating and Space Cooling;
- 22 • Small Domestic Solar Water Heating;
- 23 • Small Domestic Solar Space Cooling;
- 24 • Biomass/Biogas Cooling;
- 25 • Non-Residential Solar Daylighting; and
- 26 • Small Wind Generator

27 Incentive payments will be an up-front payment and will be determined based on system
capacity (Watts) and/or estimated annual production (kWh), as well as based on a 20-year agreement

with MWE. The following chart highlights the incentives per type of eligible Distributed Renewable Energy Resources proposed in the 2010 REST Plan:

Type	2010	2011 – 2012	2013 – 2014
Biomass/Biogas (Electric, Thermal, Cooling)	TBD	TBD	TBD
Biomass/Biogas CHP (Electric, Thermal) ¹	TBD	TBD	TBD
Daylighting ²	\$0.25 / kWh	\$0.20 / kWh	\$0.18 / kWh
Geothermal (Electric)	\$0.65 / Watt	\$0.50 / Watt	\$0.45 / Watt
Geothermal (Thermal)	\$1.25 / Watt	\$1.00 / Watt	\$0.90 / Watt
Hydroelectric	TBD	TBD	TBD
Small Wind	\$3.50 / Watt AC	\$2.50 / Watt AC	\$2.25 / Watt AC
Solar Electric – Residential ³	\$4.00 / Watt DC	\$3.00 / Watt DC	\$2.70 / Watt DC
Solar Electric – Non-Residential ⁴	\$3.50 / Watt DC	\$2.50 / Watt DC	\$2.25 / Watt DC
Solar Space Cooling ⁵	TBD	TBD	TBD
Non-Residential Solar Water Heating / Space Heating ⁶	TBD	TBD	TBD
Residential Solar Water Heating / Space Heating ⁷	\$0.95 / kWh	\$0.75 / kWh	\$0.675 / kWh
Non-Residential Pool Heating	TBD	TBD	TBD

TBD – To Be Determined

Those incentives are largely based on the Uniform Credit Purchase Program (“UCPP”) Working Group Incentive Matrix, but are updated to include increased incentives the Commission ordered for

¹ The CHP incentives may be used in combination for the appropriate components of one system.

² Rate applies to first year energy savings only.

³ Some installations may require an adjustment of the incentive.

⁴ Some installations may require an adjustment of the incentive.

⁵ Solar space heating and cooling incentives may be used in combination for the appropriate components of one system.

⁶ Solar space heating and cooling incentives may be used in combination for the appropriate components of one system.

⁷ This category includes both traditional water heating and those systems combined with residential solar water heating used for space heating. Space heating applications require a report detailing energy savings for the complete system. Rate Applies to First Year Energy Savings Only. Energy savings rating is based on the SRCC OG-300 published rating or the Uniform Credit Purchase Program Space Heating Calculator. The customer contribution must be a minimum of 15% of the project cost after accounting for and applying all available Federal and State incentives.

1 2009. MWE believes it appropriate to maintain the increased incentives for eligible Distributed
2 Renewable Energy Resources (particularly residential and non-residential solar photovoltaic
3 systems) in 2010. For those categories where the incentive is "To Be Determined", the incentive
4 amounts will be determined on a case-by-case basis and will include consideration of capital costs,
5 capacity (kW) and estimated annual production (kWh). Applicants must submit a report
6 demonstrating energy savings and that projected output will be achieved. Inspections to ensure
7 proper installation and operation will be required. Incentives will be on a first-come first-served
8 basis and it is the intent of MWE to split incentive payments so that one-half of its annual
9 Distributed Renewable Energy Requirement would be met from residential applications.

10 MWE anticipates based on its estimate of 2010 energy sales, excluding the sales to FMI
11 Morenci and FMI Safford, its 2010 annual Distributed Renewable Energy Requirement will be as
12 follows:

- 13 • approximately 110,000 kWh in 2010;
- 14 • approximately 165,000 kWh in 2011;
- 15 • approximately 231,000 kWh in 2012;
- 16 • approximately 264,000 kWh in 2013;
- 17 • approximately 297,000 kWh in 2014; and
- 18 • approximately 990,000 kWh after 2024.

19 MWE is committed to meeting these goals, but much depends on the willingness and interest
20 of customers in installing distributed renewable energy systems, particularly with respect to the
21 residential component of the annual Distributed Renewable Energy Requirement. To date, MWE has
22 advertised in the local newspaper (The Copper Era) three times in 2009 and provided the notice in
23 customer bills once. It will continue to run the advertisements periodically through the rest of this
24 year. MWE also has notice of the distributed renewable energy incentives posted in its office where
25 the customers pay their bills. To date, there has been one inquiry, but that was not from a customer
26 within MWE's service territory. Further, qualified contractors must also be willing and able to
27 provide installation and other services within MWE's service territory. To date, MWE is not aware
of any such contractors. If needed, MWE may consider establishing additional eligible Distributed

Renewable Energy Resources on its own initiative to meet its annual Distributed Renewable Energy Requirement, through issuing an RFP and/or installation of distributed generation at its own operations facilities.

IV. FUNDING

Currently, MWE collects funds through its RESS. The RESS was established in Decision No. 70303 (April 24, 2008) – Docket No. E-01049A-07-0599 – as part of its 2008 REST Plan. The Company currently collects – through the RESS – \$0.004988 per kWh capped at:

- \$1.05 per month for each residential customer;
- \$39.00 per month for each non-residential customer; and
- \$117.00 per month for each non-residential customer with demand over 3 MW per month for three consecutive months.

The RESS is shown as a separate item on customer bills. MWE's RESS Schedule – Sheet No. 33.0 – was approved as being in compliance with Decision No. 70303.

For 2010, the Company proposes no change to the RESS per-kWh charge. Further, MWE does not propose any changes to the caps. In other words, MWE proposes no increase for both residential and non-residential customers for 2010. MWE further notes both the per-kWh rate and the caps are equal to the charges set forth in the Sample Tariff in the REST Rules (Appendix A).

Based on its number of customers as of December 31, 2008, for 2010, the maximum amount MWE could collect through the RESS equals:

- \$25,565.40 per year from residential customers;
- \$118,404.00 per year from non-residential customers;
- \$2,808 per year from non-residential customers with demand over 3 MW per month for three consecutive months; for
- A total no greater than \$146,777.40.

MWE, however, does not anticipate that all of its customers will use the requisite amount of kWhs to allow MWE to collect the maximum amounts through the RESS. Given the average

1 collection through 2008 of \$4,106 per month, MWE anticipates that it will likely collect between
2 \$48,468 and \$50,000 in 2010. The range is approximate because the number of customers has
3 changed slightly since 2008⁸.

4 In other words, while the *maximum* MWE could collect through the RESS is \$146,777.40,
5 MWE anticipates that it will only collect approximately \$48,468 through \$50,000 (based on the
6 amounts MWE actually collected through the RESS in 2008). This is further shown through the data
7 MWE provided to Staff, through the process evaluating MWE's 2008 REST Plan application) on the
8 average kWh that sample MWE customers reproduced below:

9

Sample Customers	Average kWh per Month	Monthly REST (\$'s)
PD Store	221,350	\$39.00
High School	93,200	\$39.00
Motel	45,000	\$39.00
Conoco	23,460	\$39.00
Circle K	23,100	\$39.00
LDS Church	5,945	\$29.65
Restaurant	5,225	\$26.06
Florist	1,872	\$9.33
Insurance Company	992	\$4.95
American Legion	306	\$1.53
Fashion Salon	230	\$1.14

16

17 Assuming MWE's request to continue to partial waiver described below is granted, and
18 although there is substantial uncertainty about the costs associated with its 2010 REST Plan, the
19 RESS may provide sufficient funding for MWE to meet a portion of the REST Rules requirements
20 for 2010 – particularly the purchase of required grid-tied Eligible Renewable Energy Resources. The
21 RESS funding, however, will likely not be sufficient to meet the annual Distributed Renewable
22 Energy Requirement, assuming there is sufficient participation by MWE customers in the distributed
23 generation program and even with the partial waiver to exclude sales to FMI Morenci and FMI
24

25
26 ⁸ In MWE's 2008 REST Plan MWE indicated that "[in] terms of number of customers, MWE is a small electric utility
27 that serves about 2,050 customers in and around the [Town of Clifton and town-site of Morenci], Arizona. Its customer
base consists of approximately 1,785 residential customers and 265 non-residential customers. Approximately 1,200 of
the 2,050 residential customers are renters within MWE's town-site. Only 2 of those non-residential customers have
demand typically over 3 MW per month for three consecutive months." See Final MWE 2008 REST Plan, Docket No.
E-01025A-07-0599 (April 30, 2008) at 2.

1 Safford.

2 MWE may file to amend the RESS should it become apparent that more funding is needed to
3 meet the requirements within the REST Rules requirements in future years. In the alternative, MWE
4 may seek an additional partial waiver of those requirements if the RESS does not generate sufficient
5 funds to meet the requirements within the REST Rules. Currently, MWE anticipates that it will
6 require approximately \$298,365 to meet the REST Rules requirements (for both grid-tied and
7 distributed renewable generation) for 2010, assuming MWE's partial waiver request described below
8 to exclude energy sales to FMI Morenci and FMI Safford for 2010 is granted. As stated above, if the
9 partial waiver currently in place is not extended, MWE believes it will need approximately \$19.4
10 million to have the funding to purchase the requisite amount of grid-tied renewable energy and for
11 incentives for distributed renewable generation.

12
13 **V. PARTIAL WAIVER REQUEST FOR EXCLUSION OF THE LOADS FROM FMI**
14 **MORENCI AND FMI SAFFORD FROM THE ANNUAL RENEWABLE ENERGY**
15 **REQUIREMENT AND ANNUAL DISTRIBUTED RENEWABLE ENERGY**
16 **REQUIREMENT.**

17 In Decision No. 70303 (April 24, 2008), MWE requested and received a partial waiver
18 excluding the energy sales to FMI Morenci and FMI Safford from the calculations of the Annual
19 Renewable Energy Requirement under A.A.C. R14-2-1804 and the annual Distributed Renewable
20 Energy Requirement under A.A.C. R14-2-1805. The Commission extended that waiver in for 2009
21 in Decision No. 70952 (April 7, 2009). MWE requests that the partial waiver remain in effect for
22 2010.

23 MWE's load profile is and remains unique and is significantly different from any other
24 electric utility in the state. No other utility has 98.37 to 98.71 percent of its energy sales come from
25 two customers. As detailed in its proposed 2010 REST Plan proposal, MWE believes it would need
26 to spend approximately \$1,120,000 to purchase enough grid-tied renewable energy to meet its 2010
27 Annual Renewable Energy Requirement – assuming a renewable energy premium of \$35 per MWh –

1 without the partial waiver⁹. Further, MWE anticipates it would need to spend approximately
2 \$18,226,970 to meet its 2010 annual Distributed Renewable Energy Requirement¹⁰. Through
3 MWE's Renewable Energy Standard Surcharge ("RESS") current rate and caps, MWE could only
4 collect a maximum of \$146,777.40. Even if those rates and caps were increased to a rate of \$0.008
5 per kWh and caps of: (1) \$4.50 per month for each residential customer; (2) \$350 per month for
6 each non-residential customer with demand less than 3 megawatts ("MW"); (3) \$1,600 per month for
7 each non-residential customer with demand over 3 MW¹¹, the maximum amount MWE could collect
8 would equal approximately \$1,210,566.00. That kind of increase to MWE's customers would be a
9 substantial increase – particularly to its non-residential customers that are mostly small commercial
10 establishments.

11 To include the sales to FMI Morenci and FMI Safford would be unduly burdensome to
12 MWE, especially if the surcharge rates through MWE's RESS remain at the same level. Given the
13 costs for renewable resources and the state of the market for renewable resources, the limited
14 surcharges will be insufficient to cover the amount of energy that must be obtained from Eligible
15 Renewable Energy Resources and to pay incentives for eligible Distributed Renewable Energy
16 Resources. In fact, it is doubtful whether MWE would have enough customers to install the requisite
17 amount of eligible Distributed Renewable Energy Resources needed to meet the requirement. MWE
18

19 ⁹ Based on anticipated energy sales of 1,600,000 MWh in 2010, MWE would have to purchase 32,000 MWh of
20 renewable energy absent the partial waiver (80% of the Annual Renewable Energy Requirement – the other 20% to come
from eligible Distributed Renewable Energy Resources). 32,000 MWh multiplied by \$35 per MWh equals \$1,120,000.

21 ¹⁰ This assumes the cost of installing solar photovoltaic systems with an average installation cost of \$8.32 per watt –
22 taken from the National Renewable Energy Laboratory ("NREL") Report entitled "Solar Photovoltaic Financing:
Residential Sector Deployment" Jason Coughlin and Karlynn Cory (Technical Report NREL/TP-6A2-44853, March
2009) available at <http://www.nrel.gov/docs/fy09osti/44853.pdf>. (hereinafter referred to as "NREL PV Financing
23 Report") at 18. Further these figures assume that MWE provides incentives equaling 60% of the total cost to install the
24 requisite number of systems to meet the requirements each year. These figures also assume a 25% dispatch factor for
solar photovoltaic systems installed within MWE's certificated service area. MWE would have to install enough
distributed renewable generation to produce 8,000 MWh in 2010 without the partial waiver.

25 ¹¹ These per-kWh rates and caps were what was approved for Tucson Electric Power Company in Decision No. 70652
26 (December 18, 2008). TEP had a \$75.00 monthly cap for small commercial customers and a \$350.00 monthly cap for
large commercial customers. For the sake of illustration, MWE is using the \$350 monthly cap (for all non-residential
27 customers with demand less than 3 MW) to show the maximum it could collect through the RESS using the highest rates
and caps currently in effect for other electric utilities.

1 hopes, at that time, the renewable resource market will be large and mature enough so that the
2 premiums for renewable energy will be less (and the need for incentives lessened) to allow MWE to
3 meet the requirements within the REST Rules for its total amount of sales. Under MWE's proposal,
4 FMI Morenci and FMI Safford would still provide funding in accordance with the MWE's RESS.
5 FMI Morenci and FMI Safford would also be eligible to participate in MWE's Plan for eligible
6 Distributed Renewable Energy Resources also described below. Without the partial waiver, MWE
7 would have to request a surcharge per-kWh rate and caps likely to be significantly higher than its
8 present per-kWh rate and caps (perhaps over 64 times its current rates and caps) – to have the
9 funding available to attempt to meet its REST Rules requirements.

11 VI. CONCLUSION

12 MWE commits to working with the Commission and intends to make best efforts to meet the
13 requirements within the REST Rules set forth in A.A.C. R14-2-1801 *et. seq.* MWE therefore
14 requests that the Commission approve its 2010 Implementation Plan – including its Plan for
15 Distributed Renewable Energy Resources and maintaining the funding levels MWE as currently set
16 for its RESS. MWE also requests that the Commission extend its partial waiver to exclude the kWh
17 sales to FMI Morenci and FMI Safford from calculating the Annual Renewable Energy Requirement
18 under A.A.C. R14-2-1804, and the annual Distributed Renewable Energy Requirement under A.A.C.
19 R14-2-1805, in 2010.

20 RESPECTFULLY SUBMITTED this 1st day of September, 2009.

21 MORENCI WATER AND ELECTRIC COMPANY

22
23
24 By

Michael W. Patten

Jason D. Gellman

ROSHKA DEWULF & PATTEN, PLC.

One Arizona Center

400 East Van Buren Street, Suite 800

Phoenix, Arizona 85004

1
2
3 Original and thirteen copies of the foregoing
4 filed this 1st day of September 2009, with:

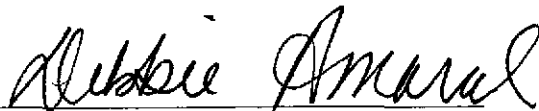
5 Docket Control
6 ARIZONA CORPORATION COMMISSION
7 1200 West Washington Street
8 Phoenix, Arizona 85007

9 Copy of the foregoing hand-delivered
10 this 1st day of September, 2009, to:

11 Lyn A. Farmer, Esq.
12 Chief Administrative Law Judge
13 Hearing Division
14 ARIZONA CORPORATION COMMISSION
15 1200 West Washington Street
16 Phoenix, Arizona 85007

17 Janice Alward, Esq.
18 Chief Counsel, Legal Division
19 ARIZONA CORPORATION COMMISSION
20 1200 West Washington Street
21 Phoenix, Arizona 85007

22 Steve Olea
23 Director, Utilities Division
24 ARIZONA CORPORATION COMMISSION
25 1200 West Washington Street
26 Phoenix, Arizona 85007
27



MORENCI WATER & ELECTRIC COMPANY

2010 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN ("2010 REST PLAN")

1. INTRODUCTION

The Morenci Water & Electric Company ("MWE") submits its 2010 REST Plan to comply with the Renewable Energy Standard Tariff Rules ("REST Rules"). The REST Rules are codified at A.A.C. R14-2-1801 to R14-2-1816. The Commission approved the REST Rules in Decision No. 69127 (November 14, 2006). The Arizona Attorney General's Office then certified the REST Rules on June 15, 2007, meaning that they became effective August 14, 2007.

MWE's 2008 Renewable Energy Standard Tariff Implementation Plan ("REST Plan") was approved in Decision No. 70303 (April 24, 2008). Its 2009 REST Plan was approved in Decision No. 70952 (April 7, 2009). That decision required MWE to submit its 2010 REST Plan proposal by September 1, 2009. The 2010 REST Plan must show how MWE intends to comply with the REST Rules and must include the following information, as required under A.A.C. R14-2-1813:

- A description of Eligible Renewable Energy Resources to be added per year for the next 5 years. A description of each technology, the kW and kWh to be obtained and the estimated cost per kWh and total cost per year.
- A description of how each Eligible Renewable Energy Resource is to be obtained.
- A proposed evaluation of whether MWE's existing funding will allow it to recover its reasonable and prudent costs of complying with the REST Rules requirements.
- A line-item budget allocating specific funding for eligible Distributed Renewable Energy Resources, for the Customer Self-Directed Renewable Energy Option, for power purchase agreements, for utility-owned systems, and for each Eligible Renewable Energy Resource described in the REST Plan.

The REST Rules require that 2.50% of total kWh retail sales be from Eligible Renewable Energy Resources in 2010, 3.00% in 2011, 3.50% in 2012, 4.00% in 2013, and 4.50% in 2014. The REST Rules further requires that 20% of the total Annual Renewable Energy Requirement come from eligible Distributed Renewable Energy Resources in 2010, 25% in 2011, 30% in 2012, 30% in 2013, and 30% in 2014.

2. BACKGROUND INFORMATION

In terms of number of customers, MWE is a small electric utility that serves about 2,284 customers in and around the town-site of Morenci and the town of Clifton, Arizona. Its customer base consists of approximately 2,029 residential

customers and 255 non-residential customers (as of December 2008). Currently, about 1,171 of the residential customers are renters within the Morenci town-site. Only 2 of the non-residential customers have demand over 3 MW per month for three consecutive months. Presently, MWE owns no generation and procures all of its power from the wholesale market to meet load.

MWE's Energy Sales in 2008 – including sales for Freeport McMoRan Copper & Gold Morenci, Inc. ("FMI Morenci") and Freeport McMoRan Copper & Gold Safford, Inc. ("FMI Safford") – were 2,246,888,027 kWh (about 2,246,888 MWh)¹. But approximately 2,217,863 MWh (98.71%) of total energy sales were to FMI Morenci and FMI Safford.

In 2007, MWE's Energy Sales were 1,872,173,183 kWh (about 1,872,173 MWh) with 1,842,038 MWh or 98.39% of total energy sales to FMI Morenci and FMI Safford². MWE forecasts its Energy Sales for 2010 to be approximately 1,600,000 MWh. MWE anticipates less energy sales in 2010 largely because of the economic downturn. Based on that forecast, MWE anticipates that its Annual Renewable Energy Requirement will be as follows – if energy sales to FMI Morenci and FMI Safford are included in the requirement:

- approximately 40,000,000 kWh in 2010;
- approximately 48,000,000 kWh in 2011;
- approximately 56,000,000 kWh in 2012;
- approximately 64,000,000 kWh in 2013;
- approximately 72,000,000 kWh in 2014; and
- approximately 240,000,000 kWh after 2024.

MWE anticipates – based its 2010 forecasted energy sales – its annual Distributed Renewable Energy Requirement would be as follows:

- approximately 8,000,000 kWh in 2010;
- approximately 12,000,000 kWh in 2011;
- approximately 16,800,000 kWh in 2012;
- approximately 19,200,000 kWh in 2013;
- approximately 21,600,000 kWh in 2014; and
- approximately 72,000,000 kWh after 2024.

MWE's first REST Plan was approved April 24, 2008. By the time MWE's proposed 2010 REST Plan is filed (September 1, 2009) the Company will have approximately 17 months of experience in implementing its annual REST Plans. There is still much uncertainty with regards to whether MWE can consistently procure renewable energy in the manner required in the REST Rules. Further, whether customers are willing and able to install and own eligible Distributed

¹ Based on MWE's Arizona Corporation Commission Utilities Division Annual Report for Year Ending 2008.

² These figures are updates to what was provided in MWE's 2007 Utilities Division Annual Report.

Renewable Energy Resources also remains uncertain at best. MWE's service territory is remote and the Company does not possess extensive expertise or personnel that can be dedicated to developing additional strategies to procure renewable resources as required in the REST Rules. Further, the economic downturn has significantly affected MWE's ability to obtain funding from its corporate parent Freeport McMoRan, Inc. ("FMI"), for projects that do not exhibit economic return.

In Decision Nos. 70303 and 70952, MWE requested and received a partial waiver excluding the load to FMI Morenci and FMI Safford from the calculation of the Annual Renewable Energy Requirement under A.A.C. R14-2-1804 and annual Distributed Renewable Energy Requirement under A.A.C. R14-2-1805 for 2008 and 2009. MWE is requesting that the waiver remain in effect for 2010. MWE's load profile is and remains unique and significantly different from any other electric utility in the state. No other utility has had 98.39 to 98.71 percent of its energy sales come from two customers. MWE anticipates that approximately 98.625 percent of its energy sales will be to FMI Morenci and FMI Safford in 2010.

To include the sales to FMI Morenci and FMI Safford would be unduly burdensome to MWE, especially if the surcharge rates through MWE's Renewable Energy Standard Surcharge ("RESS"), approved in Decision No. 70303, remain at the same level. Given the costs for renewable resources and the state of the market for renewable resources, the amount MWE obtains through the RESS will be insufficient to cover the amount of energy that must be obtained from Eligible Renewable Energy Resources. MWE hopes, at some point in the future, the renewable resource market will be large and mature enough to allow MWE to meet the respective requirements within the REST Rules for its total amount of sales. But this will not be the case in 2010.

Under MWE's proposal, FMI Morenci and FMI Safford would still provide funding in accordance with MWE's RESS described below. FMI Morenci and FMI Safford would also be eligible to participate in MWE's Plan for Distributed Renewable Energy Resources also described below.

Without the partial waiver, MWE believes it would need to spend approximately \$1,120,000 to purchase renewable energy – assuming a \$35 per MWh premium for 32,000 MWh – to meet its 2010 Annual Renewable Energy Requirement. Further, to meet its annual Distributed Renewable Energy Requirement (predicted to be 8,000 MWh in 2010 without the partial waiver) through the installation of solar photovoltaic systems, MWE anticipates that it would need to expend \$18,226,970³. This means MWE would have to spend about \$19.4

³ This assumes the cost of installing solar photovoltaic systems with an average installation cost of \$8.32 per watt – taken from the National Renewable Energy Laboratory ("NREL") Report entitled "Solar Photovoltaic Financing: Residential Sector Deployment" Jason Coughlin and Karlynn Cory (Technical Report NREL/TP-6A2-44853, March 2009) available at <http://www.nrel.gov/docs/fy09osti/44853.pdf>. (hereinafter referred to as "NREL PV Financing Report") at 18. Further these figures assume that MWE provides incentives equaling 60% of the total cost to install the requisite number of systems to meet the requirements each year. These

million in 2010 from 2,029 customers (only two of which are large industrial customers) to have the funding available to meet the 2010 REST Rules requirements if the partial waiver is not granted⁴. At the current rates and caps MWE could only collect a maximum of \$146,777.40. It is not likely, however, that MWE would collect the maximum amount through its RESS in 2010.

MWE's anticipates that its energy sales – excluding those to FMI Morenci and FMI Safford – will equal approximately 22,000 MWh in 2010 (i.e. 1.375 percent of total energy sales). MWE anticipates that its Annual Renewable Energy Requirement will be as follows:

- approximately 550,000 kWh in 2010;
- approximately 660,000 kWh in 2011;
- approximately 770,000 kWh in 2012;
- approximately 880,000 kWh in 2013;
- approximately 990,000 kWh in 2014; and
- approximately 3,300,000 kWh after 2024.

MWE anticipates based on its estimate of 2010 energy sales and excluding sales to FMI Morenci and FMI Safford, its 2010 its annual Distributed Renewable Energy Requirement will be as follows:

- approximately 110,000 kWh in 2010;
- approximately 165,000 kWh in 2011;
- approximately 231,000 kWh in 2012;
- approximately 264,000 kWh in 2013;
- approximately 297,000 kWh in 2014; and
- approximately 990,000 kWh after 2024.

3. PLAN TO PROCURE ELIGIBLE RENEWABLE ENERGY RESOURCES.

MWE is still exploring any opportunities to procure Eligible Renewable Energy Resources from one or more sources for 2009 and 2010 – including solar, geothermal, wind and/or biomass. At this time, the Company is determining to what extent it can develop and/or procure specific Eligible Renewable Energy Resources. MWE hopes that it can expand its efforts through an issuance or implementation of any responses to a request for proposal ("RFP") once there is improvement in the economy so that FMI would be willing and able to provide funding.

MWE hopes to meet or exceed the requirements within the REST Rules for its non-mining load, but faces risks including operational performance, reliability,

figures also assume a 25% dispatch factor for solar photovoltaic systems installed within MWE's certificated service area.

⁴ Factoring in administration, commercialization and integration and other necessary expenditures to implement MWE's REST Plan.

efficiency, sufficiency of transmission and deliverability of renewable energy resources. MWE is also aware of the potential for renewable contract termination and/or major delays in procuring these resources. Further, MWE hopes that, in time, the premium for renewable generation will come down in price so that MWE may procure enough renewable generation to meet its requirement without the need to seek a partial waiver (to exclude energy sales to FMI Morenci and FMI Safford) and without the need to drastically increase the rates and caps for its RESS. That is not the case in 2010, however.

The pricing for such renewable generation, however, is still at a significant premium (approximately \$35 per MWh above the cost for generation from Conventional Energy Resources). This is based on the cost of renewable generation and the cost to deliver the energy and meet the requirements of R14-2-1803.F. MWE has procured Eligible Renewable Energy Resources on a per-kWh basis in 2008. Based on this information, MWE believes the following tables best summarize the description of kWh and cost above conventional resources for MWE in 2010 – excluding the sales to FMI Morenci and FMI Safford:

Planned Renewable Generation Procurement (MWh)

Year	2009	2010	2011	2012	2013	Total
Energy – Prospective Procurement	440	495	539	616	693	2,783

Cost Above Conventional Generation (\$'s)

Year	2009	2010	2011	2012	2013	Total
Total Energy – Prospective Procurement	15,400	17,325	18,865	21,560	24,255	97,405

The above-generation cost is an estimate based upon MWE's experience in its prior renewable energy procurements. However, this market is still not mature – in MWE's estimation – and the cost estimates may vary significantly.

Ultimately, MWE must find entities willing to offer and deliver renewable power to it, given MWE's small size and remote location. Further, it must do so at a reasonable cost to it and its customers. Further, renewable generation has the potential to not meet scheduled commercial operation and may not match needed delivery schedules and planned quantities. MWE is aware of the potential for renewable contract termination or major delays in delivering renewable energy.

4. PLAN FOR DISTRIBUTED RENEWABLE ENERGY RESOURCES.

Regarding the annual Distributed Renewable Energy Requirement, MWE does not have the experience of the larger utilities in Arizona. Even so, MWE understands the importance of eligible Distributed Renewable Energy Resources to the Commission and offers the opportunity for incentive payments to customers to encourage the promulgation of eligible Distributed Renewable Energy Resources. These payments are designed to defray some of the costs of a system designed to offset a customer's typical load.

Types and Requirements for Eligible Distributed Renewable Energy Systems

Eligible distributed renewable energy resources include:

- Photovoltaic Systems;
- Solar Space Cooling;
- Non-Residential Solar Water Heating and Space Cooling;
- Small Domestic Solar Water Heating;
- Small Domestic Solar Space Heating;
- Biomass/Biogas Cooling;
- Non-Residential Solar Daylight; and
- Small Wind Generator.

An eligible distributed renewable energy system (a system applying one or more of the technologies included in A.A.C. R14-2-1802.B) must include a dedicated performance meter that allows for measurement of system energy production. Systems receiving incentives must be installed according to manufacturers' recommendations and generally accepted industry standards, as well as comply with all applicable federal, state and local regulations, accepted governmental statutes, codes, ordinances, and accepted engineering and installation practices. Any system must be inspected by the jurisdiction having authority over construction projects in the customer's locale. Any distributed renewable energy system must meet all applicable interconnection requirements. Written confirmation of meeting all applicable standards must be provided to MWE. All major components of the distributed renewable energy system must be purchased no more than 180 days before MWE receives an application for incentive payments from a customer.

Further, some technology-specific criteria reference third-party standards. The requirements of those standards are fully applicable when referenced as part of technology specific criteria. Rapid growth in national and international renewable energy programs is resulting in greater need for the development of standardization in design, implementation, performance measurement, system integrity, and installation. New standards may possibly develop in the near future for technologies included below. New standards may be added as they become available. The following standards or standard development bodies are referenced below as part of the technology criteria for specific eligible Distributed Renewable Generation Resources:

- The Active Solar Heating Systems Design Manual developed by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. ("ASHRAE") in cooperation with the Solar Energy Industries Association ("SEIA") and the ACES Research and Management Foundation (the Design Manual)
- Arizona state boiler regulations (see R4-13-406)
- The select technology specific qualification developed by the California Energy Commission ("CEC")
- Solar Rating and Certification Corporation ("SRCC"). The SRCC criteria and ratings can be viewed at www.solar-rating.org.
- The Underwriters Laboratory ("UL").
- IEEE-929 standard for utility interconnection of PV systems.

Technology Specific Criteria

The following equipment qualifications listed are mandatory requirements which must be met at the time of project commissioning to receive an incentive from MWE. The installation guidance is intended to provide consumers with information on installation and operation practices which are most likely to achieve the systems designed output. Although installation guidance is not currently mandated in order for a project to receive an incentive, it does reflect both industry and utility concurrence on those practices which are important for a technology to best achieve the designed output. In the future installation guidance items may be considered for inclusion as part of the equipment qualifications.

Biomass/Biogas Electric, Hydroelectric and Geothermal Electric

Equipment Qualifications

- Biomass system installations involving a regulated boiler or pressure vessel are required to comply with all Arizona state boiler regulations; provide a qualifying boiler inspection identification number; and keep all applicable permits in good standing.
- System must include a dedicated performance meter to allow for monitoring of the amount of electricity produced.
- Energy savings and designed output for the system will be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering report stamped by a registered professional engineer. The engineering report must provide a description of the system and major components, design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications. This certification or engineering report must be provided in Step #6 of the Application Process detailed below.
- The system must have a material and labor warranty of at least five (5) years.

- The system must meet Arizona Department of Environmental Quality ("ADEQ") environmental standards.

Installation Guidance

Because of the individual nature of biomass systems, care should be taken to make sure the system complies with all applicable permitting and regulatory requirements, including but not limited to air emission standards and air permit regulations.

Solar Non-Residential Daylighting

Equipment Qualifications

All systems shall include the following components as part of the daylighting system:

- A roof mounted skylight assembly with a dome having a minimum 70% solar transmittance.
- A reflective light well to the interior ceiling or a minimum 12" below roof deck in open bay areas.
- An interior diffusion lens.
- A minimum of one thermal break/dead air space in the system between the skylight dome and the interior diffuser.
- If artificial lighting systems remain a part of the installation the system shall include automated lighting control(s) which are programmed to keep electric lights off during daylight hours.
- The system must provide a minimum of 70% of the light output of the artificial lighting system which would otherwise be used for all of the claimed period of energy savings as measured in foot-candles.
- Energy savings and designed output for the system will be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering reporting stamped by a registered professional engineer or accredited AEE Measurement and Verification professional. The engineering report shall provide a description of the system and major components, design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications.
- The system must have a material and labor warranty of at least 5 years.

Installation Guidance

All systems should be installed such that the skylight dome is substantially unshaded and have substantially unobstructed exposure to direct sunlight between the hours of 9 a.m. and 3 p.m.

Small Wind Generator

A small wind generator is a system with a nameplate rating of one MW or less. The technology criteria described below are intended for small wind generators with a nameplate rating of 100kW or less. Larger systems will be required to

submit a detailed package describing site selection, energy production modeling, and an engineered system design and installation report.

Equipment Qualifications

- Eligible small wind systems must be certified and nameplate rated by the CEC⁵. See www.consumerenergycenter.org/erprebate/equipment.html for a list of certified generators. For grid tied or off-grid wind generators where an inverter is used, the CEC listed nameplate rating of the wind generator will be multiplied by the CEC approved weighted efficiency percentage listed for the inverter in the "List of Eligible Inverters" at www.consumerenergycenter.org/cgi-bin/eligible_inverters.cgi to calculate the wind turbine nameplate rating for use in determining the UFI payment.
- Grid connected inverters used as part of the system shall carry a UL listing certifying full compliance with Underwriter's Laboratory ("UL")-1741
- A system must include a dedicated performance meter installed to allow for measurement of the amount of electricity produced.
- The performance meter and utility disconnect will be installed in a location readily accessible to MWE during normal business hours.
- The tower used in the installation must be designed by an engineer and must be suitable for use with the wind generator. Tower installation must be designed and supervised by individuals familiar with local geotechnical conditions.
- The wind generator and system must include a 10-year manufacturer's warranty and a material and labor warrantee of at least 5 years.

Installation Guidance

- Location: a wind turbine hub should be at least 20 feet above any surrounding object and at least 28 feet above the ground within a 250-foot radius. Wind generators should be installed in locations with an elevation at or above the general elevation of the surrounding terrain.
- Lot Size: should be at minimum one-half acre. Municipalities and public facilities such as schools and libraries are exempt from the minimum lot size requirements.
- The Applicant should demonstrate its proposed system is able to obtain at least a 15% annual capacity factor. The following are readily available methods for helping to demonstrate the potential for a 15% capacity factor, but other methods may be used. The installation location should have a demonstrated average annual wind speed of at least 10 MPH as measured at a height of no more than 50 feet above the ground. Average annual wind speed can be demonstrated by wind speed records from an airport, weather station or university within 20 miles of the proposed wind generator location, or by a 50 meter wind power density classification of Class 2 "Marginal" or higher on the "State of Arizona Average Annual Wind Resource map dated July 16, 2005 or later as published by Sustainable Energy Solutions of Northern Arizona University. Northern

⁵ MWE notes that the Uniform Credit Purchase Program ("UCPP") Working Group recommends review of the SWCC standards for rating small wind generators once they become available for purposes of supplanting the CEC requirement in this Technology Criterion.

Arizona University provides detailed wind resource maps as well as other resource services. For more information contact Northern Arizona University at <http://wind.nau.edu/maps/>.

Photovoltaic Systems

Equipment Qualifications

All Systems

- All systems shall be installed with a horizontal tilt angle between 0 degrees and 60 degrees, and azimuth angle of +/- 100 degrees of due south. The eligibility for the full incentive payment will be determined by the installation configurations for some systems and subject to MWE's discretion.
- A system must include a dedicated performance meter to allow for monitoring of the amount of electricity produced.
- Photovoltaic modules must be covered by a manufacturer's warranty of at least 20 years.
- Inverters must be covered by a manufacturer's warranty of at least 10 years.

Grid-Connected Systems

- The minimum PV array size shall be no less than 1,200 W-DC
- All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of UL Standard 1703.
- All other electrical components must be UL listed.
- The inverter must be certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and it must be UL 1741 certified.
- The utility meter, inverter, and utility disconnect will be installed in a location readily accessible by MWE during normal business hours.
- Other equipment qualifications may be specifically required as determined by MWE.

Off Grid Systems are not included in this program

Installation Guidance

The Customer will be directed to the following resources to gain information regarding industry reference documents for system installation and performance forecasting:

The California Energy Commission's Guide to Buying a Photovoltaic Solar Electric System at http://energy.ca.gov/reports/2003-03-11_500-03-014F.PDF

The Arizona Consumers Guide to Buying a Solar Electric System at www.azsolarcenter.com/design/azguide-1.pdf

Solar Space Cooling

Equipment Qualifications

- The minimum cooling capacity of the system will be 120,000 BTU (10 tons) per hour.
- Solar collector panels used will have a Solar Rating and Certification Corporation ("SRCC") OG-100 rating or laboratory documentation showing the panel energy output under controlled and replicable test conditions.
- Energy savings and designed output for the system will be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering report stamped by a registered professional engineer. The engineering report shall provide a description of the system and major components, design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications.
- System must include a dedicated performance meter to allow for monitoring of the amount of heat input to the thermal cooling device or system. Energy production will be calculated at one kW-hr per 3,415 Btu of metered heat delivered to the thermal cooling device or system.
- The system must have a material and labor warranty of at least 5 years.

Installation Guidance

- The horizontal tilt angle of the collector panels should be between 20 and 60 degrees and the panel orientation should be between +/- 45 degrees of south.
- All systems should be installed such that the energy collection system is substantially unshaded and should have substantially unobstructed exposure to direct sunlight between the hours of 9 a.m. and 3 p.m.
- The system installation should comply with the design manual.

Non-residential Solar Water Heating and Space Heating

Equipment Qualifications

- Solar collector panels used will have a SRCC OG-100 certification or laboratory documentation showing the panel energy output under controlled and replicable test conditions.
- The system must include a dedicated performance customer-supplied meter to allow for monitoring of the amount of useful heat produced – if annual energy production is expected to exceed 10,000 kWh or equivalent. Otherwise, compliance reporting production will be based on the design energy savings submitted at the time of application.
- Energy savings and designed output for the system will be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering report stamped by a registered professional engineer. The engineering report shall provide a description of the system and major components,

design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications.

- The solar collector, heat exchangers and storage elements must have an equipment warranty of at least 10 years and the entire system must have a material and full labor warranty of at least 5 years.

Installation Guidance

- The horizontal tilt angle of the collector panels should be between 20 and 60 degrees and the panel orientation should be between +/- 45 degrees of south.
- All systems should be installed such that the energy collection system is substantially unshaded and should have substantially unobstructed exposure to direct sunlight between the hours of 9 am and 3 pm.
- The system installation should comply with the design manual.

Small Domestic Solar Water Heating and Space Heating

Equipment Qualifications

- Domestic Solar Water Heating systems will be rated by the SRCC and meet the OG-300 system standard. Systems that include OG-100 collectors but are not certified under OG-300 will need to be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering report stamped by a registered professional engineer detailing annual energy savings. Solar Space Heating systems will utilize OG-100 collectors.
- Domestic Water Heating systems shall be selected and sized according to the geographic location and hot water needs of the specific application. Reservation requests will include a manufacturer's verification disclosing that the system size and collector type proposed is appropriate for the specific application. The manufacturer's verification may be presented as a manufacturer's product specification sheet and will be included in the reservation request.
- Solar Space Heating systems will be sized in conformance with the Solar Space Heating Incentive Calculation Procedure attached to MWE's REST Plan as Exhibit A.
- Active, open-loop systems are not eligible for any incentives except for active, open-loop systems that have a proven technology or design that limits scaling and internal corrosion of system piping, and includes appropriate automatic methods for freeze protection and prevents stagnations temperatures that exceed 250 degrees Fahrenheit under all conditions at the location of installation. Details disclosing conformance with this exception shall be submitted as part of the manufacturer's verification documentation.
- Integrated Collector System ("ICS") systems shall have a minimum collector piping wall thickness of 0.058 inches. Details disclosing conformance with this requirement must be submitted as part of the Manufacturer's verification documentation. ICS units must include certification that collector stagnation temperature will never exceed 250 degrees Fahrenheit under any possible conditions at the location of the installation.

- The 'high' limit on all Domestic Water Heating controllers shall be set no higher at 160 degrees Fahrenheit.
- Active thermal storage for solar space heating systems shall use water as the storage element.
- Contractors must provide minimum of a five-year equipment warranty as provided by the system manufacturer, including a minimum warranty period of 5 years for repair/ replacement service to the customer.
- Domestic Water Heating systems that are installed as an addition to an existing system or are submitted as a customer-designed system or not certified to OG-300 must be specifically reviewed and approved by the utility.
- The solar collector, heat exchangers and storage elements must have an equipment warranty of at least 10 years.

Installation Guidance

- The system shall be installed with a horizontal tilt angle between 20 degrees and 60 degrees, and azimuth angle of +/- 60 degrees of due south. It is recommended that collectors be positioned for optimum winter heating conditions at a minimum tilt angle of 45 degrees above horizontal, or as recommended by the manufacturer for the specific collector type and geographic location of installation.
- All systems should be installed such that the energy collection system is substantially unshaded and should have substantially unobstructed exposure to direct sunlight between the hours of 9 a.m. and 3 p.m.
- Heat exchange fluid in glycol systems should be tested and flushed and refilled with new fluid as necessary or every 5 years or sooner per manufacturer's recommendations.
- It is recommended that the anode rod be checked and replaced per manufacturer's recommendations, but no less frequently than every 5 years.
- It is recommended that the system design include a timer, switch, or other control device on the backup element of the storage tank.
- The collectors and storage tank should be in close proximity to the backup system and house distribution system to avoid excessive pressure or temperature losses.
- It is recommended that in areas where water quality problems are reported to have reduced expected life of a solar water heater, that a water quality test is performed for each residence to screen for materials that through interaction with the materials of the proposed system may reduce the expected operational life of the system components. The customer should consider contacting the manufacturer to determine if warranty or operational life will be affected.
- In areas subject to snow accumulation, sufficient clearance will be provided to allow a 12" snowfall to be shed from a solar collector without shadowing any part of the collector.
- Each system should have a comprehensive operation and maintenance manual at the customer's site – including a spare parts list, data sheets, and flow diagrams indicating operating temperatures and pressures, maintenance schedules and description of testing methods. Further, each customer must

complete an initial start up and operation training review with the contractor at the time of system start up.

- Ball valves should be used throughout the system. Gate valves should not be used.

Technologies without Technology Specific Criteria and Non-Conforming Projects

MWE is not aware of any technology-specific criteria developed for the following qualifying technologies:

- Biogas/Biomass Thermal
- Biogas/Biogas Combined Heat and Power ("CHP")
- Fuel Cells
- Geothermal – Space Heating and Process Heating
- Non-Residential Pool Heating

For applicants requesting incentives for the above technologies or for applicants requesting installation of a technology with conforming project technology criteria but where some criteria cannot be met, the applicant will need to submit design and output documentation.

Applicants installing these systems will, at a minimum, need to provide an energy savings and designed output report for the system. The report must include either a testing certification for a substantially similar system prepared by a publicly funded laboratory or an engineering report stamped by a registered professional engineer. The engineering report and/or testing certification shall provide a description of the system and major components, design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications. Additional information may be required as part of the utility specific UCPP requirements.

Installation

The installer for any and all distributed renewable energy systems must possess a valid license on file with the Arizona Registrar of Contractors ("AZROC"), with a license classification appropriate for the technology being installed, or the installer must identify use of a contractor holding an appropriate license on file with the AZROC for the technology being installed. The installer must also have proof of liability insurance, which is to be provided when Applicant submits the application. Further, any equipment dealer must provide proof of a business license showing that the dealer is in good standing with the appropriate agency(ies) and must also provide proof of liability insurance.

Reporting Requirements

Applicants must submit a report demonstrating energy savings and that projected output will be achieved. The report must show that the distributed renewable energy system meets all applicable requirements including – if necessary – testing certification and/or an engineering report stamped by a registered professional engineer. The report must also describe the system and its major components and include designed performance and system output.

Inspections

Any and all distributed renewable energy systems must be inspected by the entity having authority to inspect construction projects within MWE's certificated service area. MWE's inspections are in addition to, and not instead of, any building and construction-related inspections. MWE must have access to any distributed renewable energy system during normal business hours for any inspection by MWE. MWE will inspect any and all grid-tied systems to ensure the system is connected to the grid in conformance with MWE's interconnection requirements. *Under no circumstances is any grid-tied system to be installed in parallel or otherwise connected with the MWE system until the time that MWE has inspected the distributed renewable energy system and gives written authorization. This inspection will only take place after the appropriate building and construction-related inspection(s) have been performed.*

Further, MWE may conduct further inspections to ensure any distributed renewable energy system continues to conform to applicable codes, regulations and standards. MWE will conduct these inspections solely within its discretion. MWE may also conduct other inspections to ensure the system is operated in compliance with the Applicant's original request and the Company's approval of the request.

Metering

All distributed renewable energy systems must include a system-dedicated kWh performance meter, which allows MWE to measure system energy production. The Applicant must include performance meters as part of the system designed and the Applicant will be responsible for the cost of the performance meter. The performance meter must be installed according to MWE's meter installation standards and is subject to inspection. These meters are in addition to billing meters and must be calibrated to meet industry standards and provide direct kWh readings.

System Operation and Maintenance

An Applicant must operate and maintain any distributed renewable energy system appropriately and must do so for the duration detailed in his or her

request and the Company's approval of such request. If an Applicant fails to maintain and operate the distributed renewable energy system in MWE's certificated service area for the period detailed in the MWE's approval of the application, then Applicant will be in default of the terms and conditions of the agreement between Applicant and MWE. Applicant will be responsible for reimbursing MWE the total amount of the incentive payment. In addition, liquidated damages may also apply. MWE, however, has the ability in its sole discretion to determine that the distributed renewable energy system is not operational due to equipment malfunction or other disrepair and that the Applicant is making efforts to repair the system and return it to operation. In that case, the reimbursement requirement will not apply.

Should a system cease to be operational, the Applicant must notify MWE within five (5) business days after the distributed renewable energy system is either removed from the property or fails to be operational. Short outages (lasting less than 30 days) that are for planned maintenance or system repair are not part of this requirement.

An Applicant who has been in default at any time will be completely disqualified for any future funding permanently.

Sale of Property

Applicant must notify MWE if Applicant sells the property on which the distributed renewable energy system is located by notifying MWE in writing. Applicant may be required to reimburse payment incentive and/or be in default – unless the subsequent owner agrees in writing to operate and maintain the distributed renewable energy system per the terms and conditions agreed to between Applicant and MWE.

Renewable Energy Credits

MWE will receive complete and irrevocable ownership of all Renewable Energy Credits or RECs expected from system production for the effective life of the distributed renewable energy system – when it makes any incentive payment to an Applicant. These RECs will be applied toward MWE's REST Rules requirements.

Incentives

Any incentive payment will be an up front one-time payment and will be determined based on system capacity (Watts) and/or estimated annual production (kWh), as well as based on a 20-year agreement with MWE. The following chart highlights the incentives per type of eligible Distributed Renewable Energy Resource:

Type	2010	2011 – 2012	2013 – 2014
Biomass/Biogas (Electric, Thermal, Cooling)	TBD	TBD	TBD
Biomass/Biogas CHP (Electric, Thermal) ⁶	TBD	TBD	TBD
Daylighting ⁷	\$0.25 / kWh	\$0.20 / kWh	\$0.18 / kWh
Geothermal (Electric)	\$0.65 / Watt	\$0.50 / Watt	\$0.45 / Watt
Geothermal (Thermal)	\$1.25 / Watt	\$1.00 / Watt	\$0.90 / Watt
Hydroelectric	TBD	TBD	TBD
Small Wind	\$3.50 / Watt AC	\$2.50 / Watt AC	\$2.25 / Watt AC
Solar Electric – Residential ⁸	\$4.00 / Watt DC	\$3.00 / Watt DC	\$2.70 / Watt DC
Solar Electric – Non-Residential ⁹	\$3.50 / Watt DC	\$2.50 / Watt DC	\$2.25 / Watt DC
Solar Space Cooling ¹⁰	TBD	TBD	TBD
Non-Residential Solar Water Heating / Space Heating ¹¹	TBD	TBD	TBD
Residential Solar Water Heating / Space Heating ¹²	\$0.95 / kWh	\$0.75 / kWh	\$0.675 / kWh
Non-Residential Pool Heating	TBD	TBD	TBD

TBD – To Be Determined

Those amounts identified in the chart were largely based on the Uniform Credit Purchase Program ("UCPP") Working Group Project Incentive Matrix, but are updated to include the increased incentives the Commission recently ordered for 2009. MWE believes it appropriate to maintain the increased incentives for eligible Distributed Renewable Energy Resources (particularly residential and non-residential solar photovoltaic systems) in 2010. For those categories where the incentive is "To Be Determined" the incentive amounts will be determined on

⁶ The CHP incentives may be used in combination for the appropriate components of one system.

⁷ Rate applies to first year energy savings only.

⁸ Some installations may require an adjustment of the incentive.

⁹ Some installations may require an adjustment of the incentive.

¹⁰ Solar space heating and cooling incentives may be used in combination for the appropriate components of one system.

¹¹ Solar space heating and cooling incentives may be used in combination for the appropriate components of one system.

¹² This category includes both traditional water heating and those systems combined with residential solar water heating used for space heating. Space heating applications require a report detailing energy savings for the complete system. Rate Applies to First Year Energy Savings Only. Energy savings rating is based on the SRCC OG-300 published rating or the Uniform Credit Purchase Program Space Heating Calculator. The customer contribution must be a minimum of 15% of the project cost after accounting for and applying all available Federal and State incentives.

a case-by-case basis and will include consideration of capital costs, capacity (kW), and estimated annual production (kWh).

Incentives will be dealt on a first-come first-serve basis and it is the intent to split total annual incentive payments so that one-half of its annual Distributed Renewable Energy Requirement would be met from residential applications. Eligibility requirements for which an Applicant may receive incentive payments to develop and install distributed renewable energy resources are described in the Company's schedule entitled "Applications for Distributed Renewable Energy Resources Schedule" – Sheet No. 31.0 – that was approved in Decision No. 70303 and is attached as Exhibit B.

Funds for incentive payments are made available for distributed renewable energy systems on the first working day after January 1st of each calendar year. Should funds collected for MWE's distributed renewable energy system not be used during the calendar year, they will be applied to the next calendar year.

Funds for any one project will not exceed 60% of the total cost of the project. This 60% cap will apply to entire system costs for the project (*i.e.*, including financing costs). But at no time will more than \$75,000 be provided in incentives for any one project. This \$75,000 cap will include the costs of financing (*i.e.*, no more than \$75,000 will be provided towards the total system cost of any one project).

Distributed Renewable Energy System Program Monitoring

MWE will track progress toward program goals by compiling data received from conducting maintenance inspections, meter readings and analyzing trends in customer participation and technology installation. New information, changing market conditions, changing assumptions and/or technological innovations may lead to changing certain facets of the REST Plan for eligible Distributed Renewable Energy Resources. MWE will bring those issues to the Commission's attention in a timely manner. MWE will report on the productivity for all distributed renewable energy systems annually by reporting on the total installed capacity and projected productivity.

Should a distributed renewable energy system be removed before its agreement term expires and without MWE's permission – or if an Applicant does not repair a system – then MWE will continue to reflect in the annual compliance reporting the annual historic energy production for the system until the agreement term for the system has been completed. The actions MWE would take, if any, to address removal of the system contrary to the agreement or failure to make needed repairs to a system would depend on the particular circumstances of the removal. MWE would note – in its annual compliance reporting – that the system had been removed and what the annual historic energy production had been before the system was removed.

MWE will, in its compliance reports, provide the information as required by A.A.C. R14-2-1812. That information includes: (1) actual kWh of energy obtained from Eligible Renewable Energy Resources; and (2) kW of generation capacity.

Application Process

1. **Applicant submits a written and signed request to MWE (i.e. "the Application").**
2. **Applicant receives approval from MWE.** This approval will be a written agreement between Applicant and MWE, and will constitute the terms and conditions that Applicant must agree to in order to receive any incentive payment. The approval will detail the time period for which the agreement applies. The approval will constitute the entire agreement between the Applicant and MWE regarding the specific distributed renewable energy system contained within the application. The approval will also specify a timeframe for which Applicant has to install and receive all approvals before having to place system in operation. Should Applicant fail to do so, then the approval will be automatically terminated and Applicant will have to submit a completely new application.

If the application is deficient, MWE will inform the Applicant of the nature of the deficiency(ies). Applicant will have an opportunity to correct the deficiency(ies) within a specific time period indicated on MWE's notification of deficiency. If deficiencies are not addressed within that time period to MWE's satisfaction, then the application will automatically be deemed denied. If an application cannot be approved because funding is not available, then the application will be put on a waiting list and MWE will send written notification to the Applicant.

3. **Applicant agrees to terms and conditions contained in the approval through written and signed confirmation explicitly agreeing to those terms and conditions.**
4. **Applicant submits proof – no later than 90 days before installation – that Applicant is going forward with installing the distributed renewable energy system approved.** This is to ensure that funds are reserved to projects that will actually be installed.
5. **Applicant submits a system design for review and approval by MWE.** MWE must approve system design before Applicant proceeds with installation.
6. **Applicant has system installed. MWE inspects the system to ensure it is connected to the grid per MWE's interconnection**

requirements. This will take place after MWE receives proof that the system has been inspected by the appropriate entity to inspect construction and building. Applicant also must include proof that installation has been performed pursuant to this REST Plan. MWE will provide Applicant with written confirmation that the system passed its installation inspection.

At no time will Applicant make any material change from the approved application without prior written consent from MWE. Applicant must submit a Proposed Modification to Application in order to receive such written consent. MWE will then determine whether additional funding is available, should additional funding be requested or required due to the material change. Should additional funding not be available, then Applicant will only receive the incentive payment amount originally approved.

7. Applicant receives one-time incentive payment.

Eligibility Requirements

Eligibility requirements are set forth in the Company's schedule entitled "Applications for Distributed Renewable Energy Resources Schedule" – Sheet No. 31.0 – that is approved in Decision No. 70303 and attached as Exhibit B. Any customer of MWE is eligible to apply for and, if approved, receive incentive payment for an eligible Distributed Renewable Energy Resources as defined in A.A.C. R14-2-1802.

1. The Applicant must apply for – and receive approval for – funding in accordance with the procedure set forth above.
2. The distributed renewable energy system must be established physically within the Company's certificated service area.
3. Any project applied for must meet the requirements for a Distributed Renewable Energy Resource described in the Arizona Corporation Commissions' REST Rule A.A.C. R14-2-1802.
4. The Company will assume no liability for any incentive payment subsequently assigned to third party(ies) from the Applicant.

All Renewable Energy Credits ("RECs") derived from any Applicant receiving incentive payment(s) for any *distributed renewable energy* system, including generation and Extra Credit Multipliers, will be applied to satisfy MWE's Annual Renewable Energy Requirement and annual Distributed Renewable Energy Requirement.

Customer Self-Directed Renewable Energy Option

Any customers paying Tariff funds of at least \$25,000 annually for any number of related accounts or services within an Affected Utility's service area are eligible for the Customer Self-Directed Renewable Energy Option. That Schedule – approved in Decision No. 70303 and attached as Exhibit C (Sheet No. 32.0) – details the requirements to be met when submitting a written application. One half of the funding must come from the Eligible Customer for each project proposed. Per A.A.C. R14-2-1809.C., all RECs derived from the project(s) will apply to satisfy MWE's Annual Renewable Energy Requirement. At this time, MWE may have two customers – FMI Morenci and FMI Safford – that are "Eligible Customers" as defined in the REST Rules.

The application process will be similar as for other customers applying for incentive payments for eligible Distributed Renewable Energy Resources. Both Eligible Customers may use this option for any distributed renewable energy system either proposes to receive funding, if they pay Tariff funds that equal or exceed \$25,000 annually aggregated for all accounts and services.

Other

Those customers who receive distributed renewable generation incentives are also eligible to receive benefits under net metering. The Commission approved Net Metering Rules in Decision No. 70567 (October 28, 2008). Those rules have been filed with the Arizona Secretary of State on March 24, 2009, and became effective May 23, 2009. MWE will have 120 days from May 23, 2009, to file its net metering tariff proposal. That tariff proposal must receive Commission approval before it can take effect.

To the extent that additional distributed renewable energy resources are needed to fulfill its annual Distributed Renewable Energy Requirement MWE's requirement, if needed, MWE may consider establishing additional eligible Distributed Renewable Energy Resources on its own initiative to meet its annual Distributed Renewable Energy Requirement, through issuing an RFP and/or installation of distributed generation at its own operations facilities..

5. BUDGET

May uncertainties still exist with the time and efforts to procure renewable resources, especially given MWE's small size and remote location. MWE cannot state with much certainty what its budget will be to procure renewable resources. MWE still believes it cannot state with any certainty what the separate costs will be for administration, implementation, commercialization and integration, and marketing and outreach.

Further, MWE has not seen much customer interest in pursuing installation of eligible Distributed Renewable Energy Resources, even with the augmented

incentives. As stated earlier, approximately 1,171 of MWE's residential customers are renters within the Morenci town-site. MWE is not sure how many residential customers are renters within the Town of Clifton. Even with incentives to cover a significant amount of the cost, these customers may not have the willingness or the ability to finance such systems. Further, because of the small size and remote location of MWE's certificated service area, MWE is not aware of any qualified contractors present and doing business within MWE's service territory able to provide installation and maintenance services. For these reasons, the figures in the following budget, especially regarding procuring eligible Distributed Renewable Energy Resources, remain preliminary estimates – with Energy Sales to FMI Morenci and FMI Safford excluded.

MWE's Estimated 2010 REST Plan Budget (\$'s)

	2010	2011	2012	2013	2014	Total
Renewable Energy Resources						
Total Energy – Prospective Procurement (Biomass) ¹³	15,400	17,325	18,865	21,560	24,255	97,405
Energy Power Purchase Agreements (Other Eligible Renewable Resources)	0	0	0	0	0	0
Utility-Owned Systems	0	0	0	0	0	0
Administration, Implementation, Commercialization & Integration	9,050	9,050	9,050	9,050	9,050	45,250
Renewable Energy – Subtotal	24,450	26,375	27,915	30,610	33,305	142,655
Distributed Renewable Energy Resources						
Incentives ¹⁴	250,620	375,930	526,300	601,485	676,670	2,431,005
Customer Self-Directed Renewable Energy Option ¹⁵	0	0	0	0	0	0
Administration, Implementation, Marketing & Outreach, Commercialization & Integration.	23,295	30,685	43,305	51,725	60,140	209,150
Distributed Energy – Subtotal	273,915	406,615	569,605	653,210	736,810	2,640,155
TOTAL	298,365	432,990	597,520	683,820	770,115	2,782,810

¹³ Assuming the renewable premium remains at \$35 per MWh.

¹⁴ This assumes the cost of installing solar photovoltaic systems with an installation cost of \$8.32 per watt as stated in the NREL PV Financing Report at 18. Further, these figures assume a 25% dispatch factor for solar photovoltaic systems and that MWE provides incentives equaling 60% of the total cost to install the requisite number of systems to meet the requirements each year. Depending on the number of systems already installed still in operation from previous years, the amount in incentives could be significantly less the following year.

¹⁵ MWE considers this option to be a subset of the total Distributed Energy Incentive budget. MWE may have two customers – FMI Morenci and FMI Safford – that could be eligible for the Customer Self-Directed Renewable Energy Option. If that turns out to be the case, MWE will make the appropriate allocation(s).

MWE will also consider participating in existing and future studies to enhance and accelerate the development, deployment, commercialization and use of renewable resource technologies to the benefit of MWE customers.

The funding is intended to cover the cost of utility scale renewable generation in excess of the cost of conventional generation resource alternatives, incentive payments for distributed renewable energy resources, marketing expenses and program implementation and administration.

6. FUNDING

Currently, MWE collects a RESS. The RESS was established in Commission Decision No. 70303 (April 24, 2008) – Docket No. E-01049A-07-0599 – as part of its REST Plan for 2008. The Company currently collects – through the RESS – \$0.004988 per kWh capped at:

- \$1.05 per month for each residential customer;
- \$39.00 per month for each non-residential customer;
- \$117.00 per month for each non-residential customer with demand over 3 MW per month for three consecutive months.

The RESS is shown as a separate item on customer bills. MWE's RESS Schedule – Sheet No. 33.0 – was approved as being in compliance to Decision No. 70303 and is attached as Exhibit D. These charges reflect the charges set forth in the Sample Tariff in the REST Rules (Appendix A).

For 2010, MWE proposes no change to the RESS per-kWh charge. Further, MWE does not propose any changes to the caps. In other words, the per-kWh increase in the RESS proposed from 2008 to 2009 equals 0% or \$0.00 for both residential and non-residential customers. MWE further notes both the per-kWh rate and the caps equate to the charges set forth in the Sample Tariff in the REST Rules.

Based on its number of customers as of December 31, 2008, for 2010, the maximum amount MWE could collect through the RESS equals:

- \$25,565.40 per year from residential customers;
- \$118,404.00 per year from non-residential customers;
- \$2,808 per year from non-residential customers with demand over 3 MW per month for three consecutive months; for
- A total no greater than \$146,777.40.

From April 2008 through December 2008, MWE collected approximately \$36,958 – or about \$4,106 per month – through its RESS. That would equal, for a twelve-month period, approximately \$49,272¹⁶.

¹⁶ In MWE's 2008 REST Plan MWE indicated that "[in] terms of number of customers, MWE is a small electric utility that serves about 2,050 customers in and around the [Town of Clifton and

In other words, while the *maximum* MWE could currently collect through the RESS is \$146,777.40, MWE is more likely to collect approximately \$49,272 through the RESS. This is further shown through the data MWE provided to Staff (through the process in evaluating MWE's 2008 REST Plan application) on the average kWh that sample MWE customers used. That data, along with data of per-kWh use from additional non-residential customers, is reproduced below:

Sample Customers	Average kWh per Month	Monthly RESS (\$'s)
PD Store	221,350	\$39.00
High School	93,200	\$39.00
Motel	45,000	\$39.00
Conoco	23,460	\$39.00
Circle K	23,100	\$39.00
LDS Church	5,945	\$29.65
Restaurant	5,225	\$26.06
Florist	1,872	\$9.33
Insurance Company	992	\$4.95
American Legion	306	\$1.53
Fashion Salon	230	\$1.14

Assuming the partial waiver request is granted and although there is substantial uncertainty about the costs associated with its 2010 REST Plan, the RESS may provide sufficient funding for MWE to meet a portion of the REST Rules requirements for 2010 – particularly the purchase of required grid-tied Eligible Renewable Energy Resources. The RESS funding, however, will likely not be sufficient to meet the annual Distributed Renewable Energy Requirement, assuming there is sufficient participation by MWE customers in the distributed generation program and even with the partial waiver to exclude sales to FMI Morenci and FMI Safford. MWE may file to amend the RESS should it become apparent that more funding is needed to meet the REST Rules requirements in future years. In the alternative, MWE may seek an additional partial waiver of the REST Rules requirements if the RESS does not generate sufficient funds to meet the requirements within the REST Rules. Currently, MWE anticipates that it will require approximately \$298,365 to meet the REST Rules requirements (for both grid-tied and distributed renewable generation) for 2010 – assuming MWE's partial waiver request to exclude energy sales to FMI Morenci and FMI Safford for 2010 is granted.

If the partial waiver is not granted for 2010, MWE anticipates it would need approximately \$19,400,000 to meet the REST Rules Requirements, or more than 64 times the amount of funding it will need to meet the requirement absent the

town-site of Morenci], Arizona. Its customer base consists of approximately 1,785 residential customers and 265 non-residential customers. Approximately 1,200 of the 2,050 residential customers are renters within MWE's town-sit. Only 2 of those non-residential customers have demand typically over 3 MW per month for three consecutive months." See Final MWE 2008 REST Plan, Docket No. E-01025A-07-0599 (April 30, 2008) at 2.

waiver¹⁷. MWE is aware that the rates and caps for customers for some other electric utilities regulated by the Commission are higher than what MWE currently charges its customers. Even so, the typical MWE residential customer earns less income than the average residential customer for other Arizona electric utilities. Further, MWE's customer base has been affected significantly by the economic downturn. MWE opposes higher rates and caps against its residential and non-residential customers with less than 3 MW of demand.

Even so, the maximum rates customers pay for month, based on an examination of other renewable energy rates assessed by other electric utilities, appears to be those of Tucson Electric Power Company, with a rate of \$0.008 per kWh and caps equaling:

- \$4.50 per month for each residential customer;
- \$350.00 per month for each non-residential customer;
- \$1,600.00 per month for each non-residential customer with demand over 3 MW per month for three consecutive months;

See Decision No. 70652 (December 18, 2008)¹⁸.

Even if these caps were proposed, and all customers used enough energy to be assessed those maximum amounts each and every month for 2010, the maximum amount MWE could collect with the increased per-kWh rate and caps would be up to \$1,210,566.00¹⁹. This would still fall well short of the amount needed in addition to meet the requirements (if the loads to FMI Morenci and FMI Safford are included). Further, it would significantly increase the rates MWE's customers are paying, particularly to its non-residential customers – most of which are small commercial establishments. In any event, MWE does not anticipate that all of its customers will use the requisite amount of kWhs so that MWE will come close to collecting the maximum amounts through the RESS.

¹⁷ Currently, MWE anticipates needing roughly \$300,000 to meet the REST Rules requirements in 2010 with the waiver granted. Without the waiver, MWE anticipates needing about \$19.4 million in 2010. \$19.4 million is more than 64 times \$300,000.

¹⁸ TEP had a \$75.00 monthly cap for small commercial customers and a \$350.00 monthly cap for large commercial customers. For the sake of illustration, MWE is using the \$350 monthly cap (for all non-residential customers with demand less than 3 MW) to show the maximum it could collect through the RESS using the highest rates and caps currently in effect for other electric utilities.

¹⁹ The maximum amount collected would be \$109,566 ($\$4.50 * 12 * 2,029$) for residential customers; \$1,062,600 ($\$350 * 12 * 253$) for non-residential customers with demand less than 3 MW; \$38,400 ($\$1,600 * 12 * 2$) for FMI Morenci and FMI Safford.

EXHIBIT

"A"

Solar Space Heating UFI Incentive Calculation Procedure.

In Advance, please perform the Design Review and Utility Bill Review (if Applicable) for numbers to enter in Steps #1, #2 and #5.

Elevation Zone Table:			
Min Elevation	Max Elevation	Heating Season Days	Daily Panel Heat Output
-1000	1000	105	0
1001	3000	140	0
3001	5000	175	0
5001	7000	210	0
7001	9000	245	0
9001	11000	280	0

Collector Thermal Performance Rating		
Data From OG-100 Sheet		
Category:	Delta T	Clear Day
A	-9 Deg. F.	
B	+9 Deg. F.	
C	+36 Deg. F.	
D	+90 Deg. F.	
E	+144 Deg. F.	

Enter Solar Panel Make and Model Number Selected for Project:

Step #1:	Enter the result of the Design Review of the Design Annual Building Loss =	0	BTU/Year
Step #2:	Enter the result of the Utility Bill Review of the Actual Annual Building Loss: (If not Electric, Natural Gas or Propane Heat, enter 0) =	0	BTU/Year
Step #3:	Calculate the Lesser of the Result in Step #1 & Step #2 = This is the Annual Building Heat Requirement.	0	BTU/Year
Step #4:	Enter Elevation of the Solar Space Heated Building:	0	Feet AMSL
Step #4 cont:	Number of Heating Days per Heating Season from Elevation Zone Table:	105	Days per Year
Step #4 cont:	Calculate Average Daily Building Heat Requirement =	0	BTU/Day
Step #5:	Enter Passive Heat Storage Specific Heat Capacity from Building Design Review:	0	BTU/Deg. F.
Step #5 cont:	Enter Maximum Daily Room Temperature Variation Allowed by Building Occupants: (Max of 10 Degrees F.)	0	Degrees F.
Step #5 cont:	Calculate Maximum Passive Heat Storage Capacity =	0	BTU
Step #5 cont:	Enter Total Active Heat Storage Heat Capacity from Building Design Review:	0	BTU
Step #5 cont:	Calculate Maximum Total Heat Storage Capacity =	0	BTU
Step #5:	Calculate the Lesser of the Average Daily Building Heat Requirement in Step #4 and the Maximum Total Storage Capacity in Step #5. This is the Maximum Useful Daily Solar Heat Input.	0	BTU/Day
Step #7:	Size the Solar Panels based on a total daily solar heat input no greater than the Maximum Useful Daily Solar Heat Input. Enter the single panel SRCC OG-100 Collector Thermal Performance Rating data in the Table Above.	0	BTU/Day per Panel
Step #7cont:	Enter the Total number of solar panels to be installed:	0	# of Panels
Step #7cont:	Calculate the Average Expected Daily Solar Heat Input:	0	BTU/Day
Step #8:	Calculate the Expected Annual Useful Solar KWH Heat Input using the Number of Heating Days times the Average Expected Daily Solar Heat Input / 3415 BTU/KWH:	0	KWH/Year
Step #9:	Enter the UFI per first year KWH UCPP Incentive Rate:	\$0.05	\$/KWH
Step #9 cont:	Calculate the Total Maximum UFI Payment Subject to Possible Limitation by the 50% of Initial Cost Cap & 15% Minimum Customer Contribution:	\$0.00	\$
Step #10:	Enter the Total Solar Space Heating System Initial Cost: This should not include costs for Passive Heat Storage or Building Heating System.	\$0.00	\$
Step #10 cont:	Calculate the Total Expected Federal and Arizona Incentives for this Project:	\$0.00	\$
Step #10 cont:	Calculate the 15% minimum of the Total Solar Space Heating System Initial Cost to be paid by Customer	\$0.00	\$
Step #10 cont:	Calculate the Total Actual UFI Payment:	\$0.00	\$

EXHIBIT

"B"

APPLICATIONS FOR DISTRIBUTED RENEWABLE ENERGY RESOURCES
SCHEDULE

Applies to: The Morenci Water and Electric Company Service Area
Greenlee and Graham County, Arizona

ELIGIBILITY REQUIREMENTS:

Any customer of Morenci Water and Electric Company is eligible to apply for and if approved receive funding for an eligible Distributed Renewable Energy Resources as defined in A.A.C. R14-2-1802.

1. The Applicant must apply for – and receive approval for – funding in accordance with the procedure set forth in the Company's Renewable Energy Standard Implementation Plan – Plan for Distributed Renewable Energy Resources.
2. The distributed renewable energy system must be established physically within the Company's service territory.
3. Any project applied for must meet the requirements for a Distributed Renewable Energy Resource described in the Arizona Corporation Commissions' Renewable Energy Standard Rule A.A.C. R14-2-1802.
4. The Company will assume no liability for any incentive payment subsequently assigned to third party(ies) from the Applicants.

All Renewable Energy Credits ("RECs") derived from any Applicant receiving incentive payment(s) for any distributed renewable energy system, including generation and Extra Credit Multipliers, will be applied to satisfy Morenci Water and Electric Company's Annual Renewable Energy Requirement and Distributed Renewable Energy Resource Requirement.

Issued: April 24, 2008

Effective: April 24, 2008

ISSUED BY:
D. L. True, Superintendant
Morenci Water and Electric Company
401 Burro Alley
Post Office Box 68
Morenci, Arizona 85540

EXHIBIT

"C"

CUSTOMER SELF-DIRECTED RENEWABLE ENERGY OPTION

Applies to: MW&E's Service Area – Greenlee and Graham County, Arizona

ELIGIBILITY REQUIREMENTS:

Eligible Customers as defined in A.A.C. R14-2-1801.H. will be subject to the terms and provisions in this schedule and A.A.C. R14-2-1809.

1. Potentially Eligible Customers apply for – and receive approval for – funding in accordance with the procedure set forth in the Company's Renewable Energy Standard Implementation Plan – Plan for Distributed Renewable Energy Resources, subject to the additional provisions contained in this schedule, if either is eligible for Customer Self-Directed Renewable Energy Option per the Arizona Corporation Commission's Renewable Energy Standard Rules ("RES Rules"). If a customer is determined to be an "Eligible Customer" as defined in the RES Rules, then that entity must apply for funding per this schedule.
2. An Eligible Customer is eligible to receive funds per this schedule if the total of all RES-related payments made to MW&E for service for their respective service accounts total \$25,000 or more in the previous calendar year.
3. Funds an Eligible Customer receives during a calendar year will not exceed RES-related payments made to MW&E during the previous calendar year. No payments made in other Affected Utilities' service territories count as payments made to MW&E for purposes of receiving funds.
4. An Eligible Customer will provide at least half the funds necessary to complete each proposed project (A.A.C. R14-2-1809.B.)
5. Projects established through this option must be used in the operations of the Eligible Customer and within MW&E's service territory.

All Renewable Energy Credits ("RECs") derived from any Applicant receiving funding per this schedule for any distributed renewable energy system, including generation and Extra Credit Multipliers, will be applied to satisfy MW&E's Annual Renewable Energy Requirement and Distributed Renewable Energy Resource Requirement.

Issued: April 24, 2008

Effective: April 24, 2008

ISSUED BY:

D. L. True, Superintendent
Morenci Water and Electric Company
401 Burro Alley
Post Office Box 68
Morenci, Arizona 85540

EXHIBIT

"D"

RES TARIFF: RENEWABLE ENERGY STANDARD SURCHARGE SCHEDULE

Applies to: The Morenci Water and Electric Company Service Area
Greenlee and Graham County, Arizona

MW&E's Renewable Energy Standard Surcharge ("RESS") – established in Decision No. 70303 (April 24, 2008) – will apply to all retail service. All provisions of the customer's current applicable rate schedule will apply in addition to this surcharge. MW&E will evaluate – from time to time – the RES program spending requirements. If necessary the RESS may be increased if it becomes apparent that more funding is needed for MW&E to meet the RES in future years. The Commission must approve any increases to the RESS. Any change to the RESS amounts will be applied in billing cycle 1 beginning in the month following Commission approval and will not be prorated. Additional details regarding the RESS can found in MW&E's Renewable Energy Standard Implementation Plan in Docket No. E-01049A-07-0599, the Commission approved in Decision No. 70303 (April 24, 2008).

Surcharge:

A RESS of \$0.004988 per kWh will be charged to MW&E customers, but capped as follows:

Residential Customers:	\$1.05 per month per service
Non-residential Customers:	\$39.00 per month per service
Non-residential Customers with demand of 3 MW per month for three consecutive months:	\$117.00 per month per service

The RESS will be shown as a separate item on customer bills. The RESS is established pursuant to A.A.C. R14-2-1801 through R14-2-1816, which was approved by the Commission in Decision No. 69127 (November 14, 2006).

Issued: April 24, 2008

Effective: April 24, 2008

ISSUED BY:
D. L. True, Superintendent
Morenci Water and Electric Company
401 Burro Alley
Post Office Box 68
Morenci, Arizona 85540